A new species of polyaspid mite closely related to *Polyaspis berlesei* Camin 1954 (Acarina: Polyaspidae).

by

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In his revision of the Cohort Trachytina Trägårdh 1938, Camin (1953) stated the characteristics for the diagnosis of the genus *Polyaspis* Berlese. In a later publication (1954) he demonstrated "..... that Berlese's description of *Polyaspis patavinus* (1881), the type species of the genus *Polyaspis*, was based on at least two different species of closely related mites" (p. 25). *Polyaspis berlesei* Camin was described in detail as the probable second species used by Berlese in his description of *P. patavinus*.

Polyaspis potchefstroomi, new species.

This mite is closely related to *P. berlesei*. Two specimens, one an adult female and the other a nymphal specimen, were collected in Potchefstroom during August 1955. They were both found in soil and associated with a decaying dahlia-bulb.

Adult Female:

General appearance similar to that of *P. berlesei*.

Body length 0.74 mm., width 0.52 mm. Colour, brown.

Venter (fig. 1): *Polyaspis potchefstroomi* corresponds with *P. berlesei* in the following respects:

(i) Sternal shield fused with endopodal, paradopal, metapodal and peritremal plates and extending laterally around epigynial shield. Perigenital rim of sternal shield fused with small ventral shield. Distribution of sternal setae I to III and pseudosternal setae.

(ii) Epigynial shield continuous with ventral shield.

(iii) Ventral shield reduced and devoid of setae. Ventral setae I similar to sternal setae; ventral setae II, III and IV large and leaf-like. It could not be ascertained whether they originate from small platelets as in *P. berlesei*.

(iv) Tritosternum (fig. 2) with pentagonal base and single three-branched lacinia.

(v) Peritremes short.

The venter of *Polyaspis potchefstroomi* may be distinguished from that of *P. berlesei* on the basis of the following:

(i) The median branch of the lacinia of the tritosternum with short setules. The two lateral branches are both only bipartite.

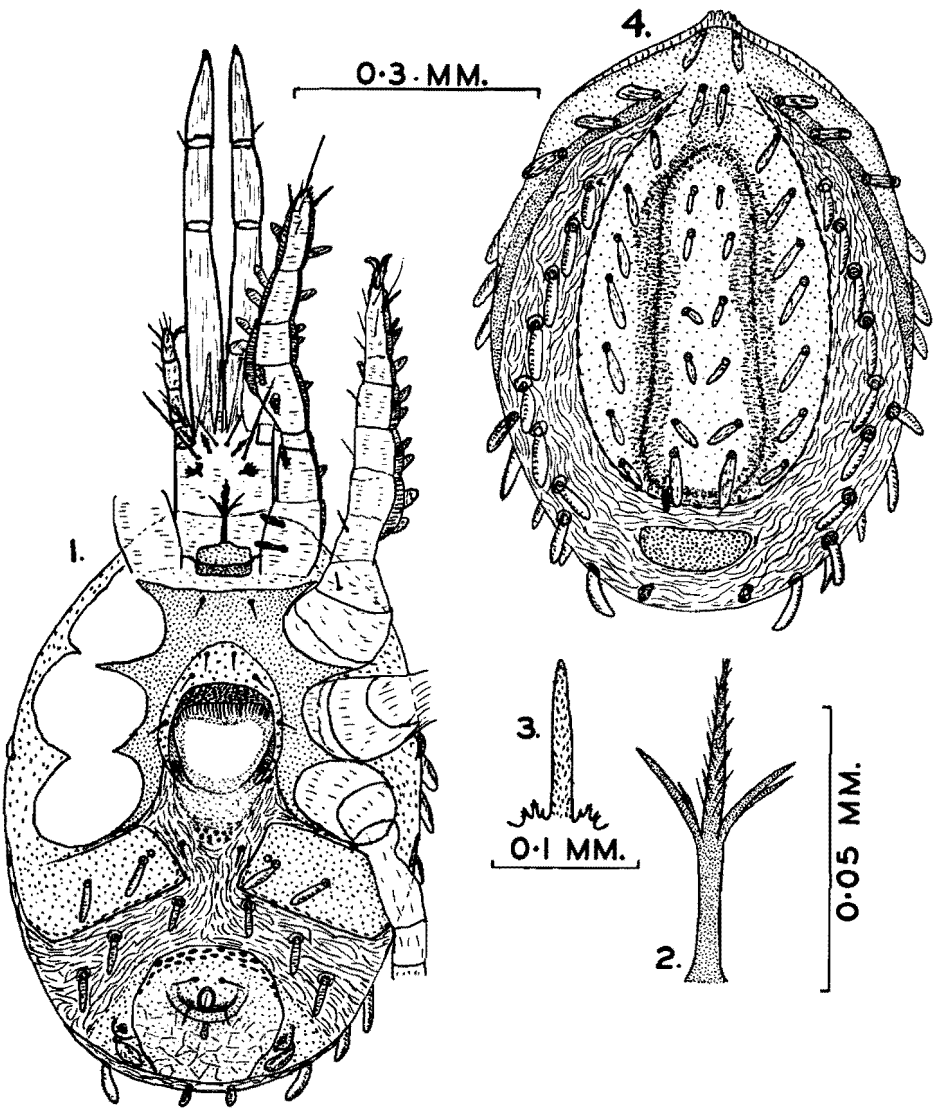

Fig. 1. Ventral view of *Polyaspis potchefstroomi*, n. sp., female.
Fig. 2: Tritosternum of female.
Fig. 3: Tectum of female.
Fig. 4: Dorsum of female.

(ii) The anal shield with a distinguishable round middle portion. The "rudder-like" projection bearing the anus is well-sclerotised and continuous. The large leaf-like pair of setae lateral to the postanal seta arise from the posterior edge of a pair of prominent projections. These projections appear like miniatures of the one bearing the anus.

(iii) A conspicuous pore next to each of the medial setae of the metapodal shields.

Gnathosoma (figs. 1 and 3): General appearance similar to that of *P. berlesei* as described by Camin (1954, p. 31).

The ventrally situated setae on the tibio-tarsus of the pedipalps however, are simple and not spiny.

The medial process of the tectum (fig. 3) is flanked by a pair of three-pronged spinose processes.

Dorsum (fig. 4): General appearance similar to that of *P. berlesei.*

Large median dorsal shield with at least 14 pairs of setae distributed as shown in fig. 4. The presence of another pair is suspected at its posterior margin. Only one seta can be observed in this specimen. This pair may well be homologous to the setae in the band of soft integument between the median dorsal and small posterior dorsal shield of *P. berleisei.* In *P. potchefstroomi* the band is without setae or platelets.

Twelve pairs of inner and seven pairs of outer marginal setae are present.

Nymph:

Owing to injury and distortion a detailed description is not possible.

Colour yellowish. General appearance similar to adult.

Sternal shield with three pairs of setae. Pseudosternal and metasternal setae on soft integument. Tritosternum as in adult.

Tectum with two-pronged lateral spiny processes.

Median dorsal shield with narrow posterior part flanked by two postero-lateral dorsal shields each with 2 pairs of setae. As is the case in the adult the integument between the median dorsal and posterior dorsal shields is without setae.

Type specimens: The holotype female and paratype nymph are deposited in the collection of the Department of Zoology of the Potchefstroom University.

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